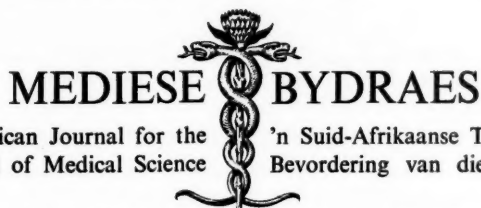


MEDICAL PROCEEDINGS



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REDAKSIONEEL · EDITORIAL

VERGELYKENDE STUDIES OOR HIPERTENSIE

Onlangse navorsingswerk het belangrike gegewens opgelewer wat betref die voorkoms van hoë bloeddruk by verskillende rasse-groepe.

HIPERTENSIE BY KLEURLINGE EN BANTOES

Dit is bekend dat hoë bloeddruk 'n heeltemal gewone verskynsel by die Bantoes van Suid-Afrika is. Fraser¹ (Coronation-hospitaal, Johannesburg) het derhalwe ondersoek na hipertensie by Bantoe- en Kleurling-binnepasiënte ingestel, met spesiale verwysing na die voorkoms en etiologie daarvan, en die morbiditeit en sterftesyfer. Gevalle wat oor 'n tydperk van 2 jaar tot een van die 2 mediese eenhede by die Coronation-hospitaal toegelaat is, is vir hierdie studie gebruik. Dit het geblyk dat vroue meer dikwels as mans aangetas word.

Die feit dat nie-blankes 'n korter lewensverwachting as blankes het (en gevolglik meer gevalle van hipertensie onder die laer ouderdomsgroepe toon) skyn die indruk te wek dat hoë bloeddruk op 'n vroeër leeftyd by eersgenoemdes as by laasgenoemdes voorkom. Kwale van die koronêre slagaaar en trombose is feitlik onbekend onder die Bantoe; die voorkoms daarvan is hoër by die ander gekleurde rasse, maar nie naastenby so hoog as by blankes nie. Die feit dat uremie meer dikwels by Kleurling-hipertensiepasiënte aangetref word, word toegeskryf aan die algemene voorkoms

COMPARATIVE STUDIES ON HYPERTENSION

Recent investigations have contributed much of interest in respect of the incidence of hypertension in different racial groups.

HYPERTENSION IN THE COLOURED AND THE BANTU

Hypertension is known to be quite common in the Bantu in South Africa. Fraser¹ (Coronation Hospital, Johannesburg) therefore investigated hypertension among Bantu and Coloured in-patients in respect of incidence, aetiology, morbidity and mortality. Cases admitted to one of the 2 medical units at Coronation Hospital over a period of 2 years were used for this purpose. Women were more often affected than men.

The fact that non-Whites have a shorter life expectancy than Whites (and hence show a higher incidence of hypertension among the lower age groups) tends to create the impression that hypertension occurs at an earlier age in the former than in the latter. Coronary artery disease and thrombosis is almost unknown among the Bantu; the incidence is higher in other Coloured races, though not nearly as high as in Whites. The more frequent occurrence of uraemia among Coloured hypertensive patients is attributed to the prevalence of primary renal disease (hydro-nephrosis, chronic glomerulonephritis, necro-

1. Fraser, B. N. (1959): Brit. Med. J., 1, 761.

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by hulle van primêre nierkwale (hidronefrose, chroniese nierliggaamontsteking, nekrotiserende papilontsteking, chroniese nier- en nierbekkenontsteking, ens.). Elektrokardiografie is uitgevoer in die meeste gevalle wat bestudeer is; selfs in die ligter gevalle het die EKG dikwels veranderings getoon wat 'n mens aan 'n linkerhartkamer-oorig laat dink het. Ondervoeding kon gedeeltelik hiervoor verantwoordelik gewees het. Die doodsoorsaak was skynbaar betreklik egalig versprei tussen hart versaking, serebrovaskulêre ongevallen en uremie. Endokrienegevalle was 'n seldsaamheid.

BLOEDDRUK-STUDIES IN INDIE

Daar is baie min gegewens oor bloeddruk-peile by Indiese. Padmavati en Gupta² het onlangs ondersoek ingestel na die bloeddruk van 1,132 persone met 'n swak ekonomiese status en 224 individue in die hoër inkomstegroep in Delhi.

Hul bevindings kan soos volg saamgevat word:

In die geval van die lae inkomstegroep was daar so te sê geen styging van die sistoliese en diastoliese druk met die toenemende jare nie, behalwe 'n konstante klein styging by vroue. Toename in die liggaamsgewig het egter 'n opvallende styging van sowel die sistoliese as die diastoliese druk meegebring.

Wat die hoër inkomstegroep betref, was die liggaamsgewig en die bloeddruk in iedere dekade hoër as in die geval van die lae inkomstegroep. Toenemende ouderdom en liggaamsgewig het 'n standhoudende styging van die bloeddruk meegebring.

In vergelyking met die westerse syfers het die lae inkomstegroep in iedere dekade 'n laer sistoliese druk getoon, terwyl die diastoliese druk slegs na die ouderdom van 40 jaar laer was.

Die gevolgtrekking word derhalwe gemaak dat die laer bloeddruk onder die lae inkomstegroep die gevolg is van laer liggaamsgewig, tesame met die afwesigheid van enige gewigtoename met stygende ouderdom. Die voorkoms van suiwer hipertensie was 0.17% in die lae inkomstegroep, en 2.5% in die hoër inkomstegroep.

BLOEDDRUK BY DIE AUSTRALIESE INBOORLINGE

Die bloeddrukpeile van inboorlinge in Sentraal-Australië is laer, en in Queensland hoër as dié wat by vergelykbare blankes aangetref

tizing papillitis, chronic pyelonephritis, etc.). Electrocardiography was performed in most of the cases studied; even in the milder cases, the ECG often showed changes suggesting left ventricular preponderance, for which malnutrition may have been partly responsible. The cause of death seemed to be fairly evenly distributed between heart failure, cerebrovascular accidents and uraemia. Endocrine cases were rare.

BLOOD PRESSURE STUDIES IN INDIA

Very few data exist concerning blood pressure levels in Indians. Padmavati and Gupta² recently studied the blood pressures of 1,132 persons of poor economic status and 224 individuals of high income groups in Delhi.

Their findings may be summarized as follows:

In the case of the low income groups there was almost no rise in systolic and diastolic pressures with age, except for a constant small rise among women. Increases in body weight, however, were accompanied by a marked rise in both systolic and diastolic pressures.

In the high income groups, the body weight and the blood pressure were higher in every decade than in the low income groups. There was a consistent rise in blood pressure with both age and body weight.

Compared with Western figures, the low income groups had lower systolic pressures in every decade, whereas the diastolic pressures were lower only after the age of 40 years.

The conclusion is drawn that the lower blood pressure among the low income groups is the result of lower body weight together with an absence of any weight gain with age. The incidence of true hypertension worked out at 0.17% in the low income groups and 2.5% in the high income groups.

BLOOD PRESSURE IN AUSTRALIAN ABORIGINES

The blood pressure levels of aborigines in Central Australia are lower, and in Queensland higher, than those of comparable Europeans. In both groups the pressure rises more slowly with age than in Europeans.³

Comparative studies such as those outlined here should prove of much assistance in for-

2. Padmavati, S. en Gupta, S. (1959): *Circulation*, **19**, 395.

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3. Casley-Smith, J. R. (1959): *Med. J. Austral.*, **46**, 627.

word. By albei groepe styg die druk stadiger mer ouderdom as in die geval van blankes.³

Vergelykende studies, soos dié wat hier uiteengesit word, behoort van groot hulp te wees by die formulering van die probleme waarvoor ons te staan kom in ons pogings om die ingewikkelde etiologie van hipertensie te begryp.

Die Indiese gegewens is veral van groot belang ten opsigte van die klem wat hulle op liggaamsgewig laat val. Daar is op die huidige tyd 'n byna obsessie-agtige preokkupasie met dieet en die bloedlipoproteïene as faktore wat kardiovaskulêre kwale kan veroorsaak. Klem word gelê op die verbruik van voedsel wat die peil van bloedlipiede laag sal hou. Maar dit kan bes moontlik bewerkstellig word sonder om die liggaamsgewig noodwendig te verminder. Trouens, dit kan selfs toeneem. Die lank reeds bekende feit dat 'n te hoë gewig ongesond is, is pertinent deur die Indiese navorsers beklemtoon, en behoort veel te doen om ons weer 'n sin vir ewig in hierdie sake te gee, want die wysheid van die eeue het ons geleer dat, wat betref dieet, net soos so baie van ons ander bedrywighede, gematigheid die wagwoord behoort te wees.

3. Casley-Smith, J. R. (1959): *Med. J. Austral.*, **46**, 627.

mutating the problems which confront us in the attempt to understand the complex aetiology of hypertension.

The Indian data are of particular interest in respect of the emphasis they place on the role of body weight. There is perhaps at the present time an almost obsessional preoccupation with diet and the blood lipoproteins as factors in the production of cardiovascular disease. There is emphasis on the ingestion of a diet which will keep down the level of blood lipids. But this may be achieved without necessarily lowering the body weight. Indeed, it may even increase. The well-known and long-recognized fact that it is not healthy to be overweight is pointedly brought out by the Indian investigators, and should do much to re-establish the sense of proportion in these matters, which propounds, with the wisdom of the ages, the need for moderation in diet no less than in many other human activities.

CHRONIC DEMENTS

A MULTIFACTORIAL THERAPEUTIC APPROACH TO THEIR MANAGEMENT

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and

MORRIS GINSBURG, M.D.†

The opening of wards in mental hospitals is no longer new. The philosophy of 'open wards' has become an integral part of the modern orientation in mental institutions the world over. There is hardly a mental hospital in existence to-day that cannot boast of at least one open ward. In fact, this is an understatement, for even before the concept of the open ward was accepted, selected patients were always known to have been granted special facilities. The numbers, however small, formed the nucleus of the first open wards.

In line with Milton Greenblatt, we felt that similar projects were possible amongst the most degenerate and deteriorated patients. One of us had previous experience in opening and re-activating 'chronic' wards at Fort Napier Hospital, where the bulk of the patients were the irrecoverables from other institutions for

the mentally ill. They had been transferred during the 1930's to create vacancies in 3 hospitals shortly after Fort Napier had been opened.

Accordingly we selected the ward in which the most deteriorated and demented patients were housed. In spite of the previous experience of pioneers like Greenblatt, we were awed by the enormity of our project. This ward had become the waste-paper basket of our hospital; it was brimful. Every discard found his way there. As such it served a vital, if not desperate function.

It seemed an insoluble situation; the 'chronic' ward had become part of the life blood of the hospital. We were, in fact, as so many before us, about to attempt to destroy a tradition. Professor Hurst¹ describes the situation aptly when he says:

'The open door system . . . could not be introduced out of the blue as it ran contrary to the training of the greater part of a lifetime in many cases, of the hospital personnel and, indeed, the older residents among the patients.'

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†Physician Superintendent, Sterkfontein Hospital, Sterkfontein.

Gillis,² in discussing this factor, says:

'Isolation of the individual as a result of forces operating within himself is a protective device. . . . The habitual tendency to withdraw in the face of stress falls into the category of a neurotic or psychotic response, and it is clear that most neuroses and certainly schizophrenia amongst the psychoses, shows this sort of withdrawal. . . . Emotional disturbance and mental disorders of any sort also serve to isolate the afflicted person. . . . He cannot participate adequately in normal conversation and manner of expression and meaning in interpersonal relationships are lost. . . . This inevitably results in the most profound loneliness. . . . The sufferer in obtaining a refuge in isolation, finds this condition not a protection and assuagement but an intensification of his misery. . . . A somewhat different form of isolation is encountered when one considers the relation of the mentally ill person to the normal group of which he ordinarily forms a part. Here exclusion is used by the group to subserve its equanimity. . . . Mental illness . . . is a disorganizing force in the community and, being unable to deal with it in any other way, the community will tend to exclude the sufferer by placing him in the custodial care of a mental hospital. . . . By doing this we impose what control on them they seem to need, and thereby re-assure and safeguard ourselves. The age-old tradition of segregating the mentally ill seems then to arise from the normal psychopathology of the community.

It is clear, then, that in the final rejection of a 'chronic' ward the isolation of the patient is complete. This was the anti-therapeutic situation with which we were confronted. Here was the atmosphere to perpetuate their illness.

THE WARD AND ITS INHABITANTS

The ward we chose was called M.E.2. (Male European 2), it was a large face-brick, slate-roof building embodying a fenced-in courtyard. The traditional verandah faced this airing garden in which the great majority of the population spent its days. There were 65 patients. Some sat on the benches, but most lay on a slope of grass, like grotesque lizards silently sunning themselves. Some walked perpetually, others stood motionless, totally absorbed in the secrets of their own living. Some stood urinating. Some were always soiled; 32 were continually exposing themselves by removing their clothes. During meals only 36 could be persuaded to sit at a table. The rest were fed wherever they were. Of this bizarre devastation only 2 patients and occasionally 3 were sufficiently presentable and well enough to attend hospital functions.

The most soul-destroying aspect of this group was their complete lack of contact with one another and with the staff. They were virtually 65 isolated individuals, degenerated,

unemployable, hopeless. As far as possible this ward was avoided when there were visitors to the hospital.

In other large wards, both European and Bantu, there is always a distinct social structure. A currency circulates, commodities are exchanged, there are leaders and workers. A bourgeoisie and serfdom exist side by side in this dynamic community.

In M.E.2 each lived in his own separate and individual world. The ward itself was cared for by the nursing staff and a few chronic Bantu patients.

Fig. 1 depicts the classification of the 65 patients:

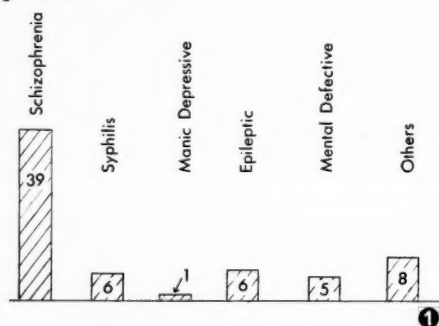


Fig. 1. Classification of patients.

DURATION OF STAY IN HOSPITAL

Of the 65 patients the bulk were detained from 5 to 20 years, one over 40 years. Fig. 2 shows the overall picture of the length of stay in the hospital.

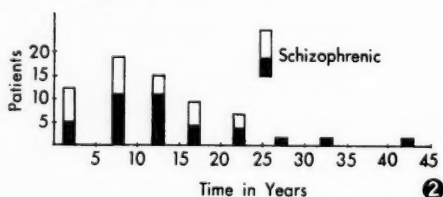


Fig. 2. Duration in hospital.

This was the picture as we saw it. The question was, Could anything be done for these derelicts? Would treatment still help?

THE TREATMENT

In this group it was clear that we had a multifactorial problem, and every weapon in the psychiatric armamentarium had to be used.

We visualized working parties, psychotherapy, occupational therapy, neuroleptics and recreation.

An initial rating scale would give us a base line which we could assess at frequent intervals. The rating scale used was the Parkside Behaviour Rating Scale.³ It is a 6-point scale comprising:

(a) Self care; (b) Orientation; (c) Communication; (d) Psychotic behaviour; (e) Co-operation; and (f) Reaction to environment.

On each of these points the patients could score a minimum of 1 and a maximum of 5 points. In our first rating the majority of the patients scored 1 for each item.

Occupational Therapy. With the exception of one patient, the rest were completely unsuited for the organized occupational therapy of the hospital. We were forced to establish a special occupational therapy system for this ward. It consisted of 2 separate forms:

(a) An outdoor section whose main function was to work in an organized group levelling the grounds, digging drains and gardening, gardening being the final goal they achieved.

(b) An indoor unit, which made use of old tins, bottle tops, odd metal sheets and discarded wire. The articles they created were planned so that the patients worked as a group. Scoops were made out of old drug tins. The scoops were of practical value to the hospital in general and helped to boost the morale of the patients when they began to realize they were needed. In addition many of these articles have subsequently been sold; again the ward as a whole benefited by its new feeling of independence.

The initial selection of the 2 groups was most arbitrary. Those who were infirm went indoors.

Drugs. From the beginning we were going to give a large proportion one or other of the neuroleptics. Stelazine was chosen largely by chance, as it was comparatively new and it would be a more than searching trial for this preparation.

Thirty-three of the 39 schizophrenics were put on Stelazine, of the other 6, 5 had made satisfactory progress on Largactil, and they were even then the elite of the ward. Of the 39 the majority had all the pre-tranquillizer treatments such as insulin and ECT and whatever was available before they were considered as demented. In the non-schizophrenics no Stelazine was used.

We started by giving the patients 5 mg. Stelazine tablets as a basic initial dose; every 4th day the dose was increased by 5 mg. The maximum dose reached for each patient was dictated by his own response, either by the severity of the side effects or by the improve-

ments displayed; 28 patients received 50 mg. and more. The maximum reached was 100 mg. daily in the case of one patient. At this maximum dosage he did not respond to his hallucinations and was able to participate actively in all the projects. Another patient, usually impulsive and violent and in the habit of throwing himself against the walls and beds, settled down on 90 mg.; for the first time he could be persuaded to join a working party. There were 6 others whose dosage was 90 mg. At this dosage they were all able to take an active part in the occupational therapy. Until this dose was given they were indifferent and disinterested.

In 2 patients 1 tablet produced immediate side effects which will be referred to later. The minimum dose with beneficial results was 35 mg. a day.

Table 1 depicts the dosage range required in our group.

TABLE 1

Dosage (in mg.)	Patients
15	2
30	1
35	1
40	1
45	1
55	4
60	15
90	7
100	1

There was no relationship between the dosage and the improvement note on the rating scale. Some improved on 55 mg. as markedly as others on 90.

By the second week it was clear which of the patients were on Stelazine. Those on Stelazine had become restless and were continually pacing the airing court and were becoming activated.

The maximum dosage for each individual was maintained for 2 months and then decreased by 5 mg. every 4th day to a maintenance dose of 15 mg. daily.

Side Effects. Nineteen patients in all showed side effects; 2 patients had to have their treatment terminated on the initial dose of 5 mg. *t.d.s.*, one because of a marked akinetic state; the other because of a facial oedema. In both cases, after a period of rest the Stelazine was again tried but there was a repetition of the side effects and the Stelazine was abandoned.

The akathisia described by Hodge⁴ was the most common side effect seen occurring with parkinsonism. This consisted of a marked restlessness and gave the impression that, while the patient was being addressed, he marked time. They could neither sit nor stand and in some cases there was a disturbance of sleep. These symptoms were quickly brought under control by the use of anti-parkinsonism drugs such as Artane, Cogentin or Disipal. When the side effects such as akathisia were encountered, Artane was given and no reduction of dosage was considered until we had achieved our object, unless the symptoms were distressingly severe. An urticaria-like rash occurred in only one patient. This responded to antihistamines without a reduction of dosage.

White cell counts were taken before the treatment was begun and during the decrease of the dosage. These were essentially unchanged.

A leukemic was discovered among the non-Stelazine group.

We had no cases of jaundice or agranulocytosis.

Because of the marked activating properties of Stelazine, patients were loath to remain in the indoor occupational therapy unit. It was a trial standing at a work bench while being so restless. As the dose was reduced this aspect improved and with it a desire to get on with the work at the bench.

Psychotherapy. The giving of Stelazine was in fact the basis of making contact. Not only was the doctor involved but also every member of the nursing staff. From apathy and neglect there was suddenly an intense interest. The rating scale necessitated that each and every patient had to have 3 complete interviews with the doctor on his daily round. The staff were constantly reporting on side effects, necessitating frequent contact with the patients.

The interest and acceptances of everything each individual achieved, either in the way of personal dress, cleanliness or whether it was at work or play, was enormously therapeutic. Unfortunately, due to staff shortage, individual psychotherapy was not possible. This was a great distress to us. It was clear that so much more could be done at this level. In this new therapeutic atmosphere there were many tentative attempts on the part of the patients to re-establish some form of identity. We tried to encourage this, but we were so deeply committed by circumstances to the group, that we could not exploit this exciting awakening of

the withdrawn. We could not use the interpersonal relationships that grew for the first time in this ward. The patients were in the midst of a great change, an upheaval in every respect of their set lives. This must have created tremendous anxiety.

We had a clear example of this at the height of the project. The doctor in charge of the ward was ill—the charge-nurse had been away for a few days. The patients were at the height of the 'great push' in their working parties. There was pandemonium. They walked restlessly to and fro in the yard. They were anxious and troubled. They were hostile and resentful for days after the staff returned.

In one case individual psychotherapy was attempted. A catatonic, mute for 20 years was chosen. He was seen every day for a period of 15 minutes. The routine and introduction were never changed:

'I am going to spend the next 15 months with you, Mr. K. If you wish to use it, you may do so. If you prefer to remain silent I will understand.'

The interviews would then continue in silence, an easy, accepting silence. At the end of 9 weeks he spoke for the first time. He was then put on to Stelazine and encouraged to accompany a working party. The interviews, alas, had to end. He never spoke again in spite of all the fantastic changes that took place around him.

We were acutely aware of this problem, but we took courage from the hope that we were creating a milieu within which isolation would be impossible.

Some of our most potent psychotherapy sprang from spontaneous and unplanned recreation. A football in the airing garden provided a further means of contact. The ball was a most unusual sight in this ward, but more unusual still was the sight of some of these patients making an effort to join in the fun. On these occasions we heard laughter for the first time.

In addition to this there were excursions to the hospital library, and a member of this ward took a leading part in a debate, organized by the patients' social club.

As improvements took place, more and more patients took part in the intra-ward activities.

RESULTS

The results were all that we anticipated and more. We showed once again that the schizophrenic, no matter how deteriorated, can be reclaimed to a varying degree of usefulness. This

is a fact well worth repeating and in a sense justifies the publication of this article.

By the end of the first phase 6 months after the commencement of the project there were:

- i. No wet and dirty patients, except for 2 occasionally;
- ii. They cleaned the entire ward themselves; served their meals, set their own tables;
- iii. All wore clothes continuously;
- iv. Everyone sat at the table for his meals. They choose tables of foursomes;
- v. Radical haircuts had now been discouraged;
- vi. 15 patients now attended all hospital functions.

Eight patients were fit for leave of whom 2 at one stage were fit for sheltered employment. Of these 8, 5 were on Stelazine.

The Rating Scale. There was uniform and marked improvement in 3 items of the scale, viz. self-care, communication and co-operation in both the Stelazine and non-Stelazine groups. This is what one would have expected by improving the conditions in the ward.

In the other items (orientation, psychotic behaviour, mood changes) those on Stelazine showed a consistent gain over the non-Stelazine Group of up to 10%.

The question may be asked, was this a correct comparison using non-schizophrenics as a control group. The answer is *No*, but it was of great interest to us to find that in this altered atmosphere the wet and dirty feeble-minded elements showed an improvement similar to that of the schizophrenics. It was abundantly clear that the level of improvement in our non-schizophrenic group must be severely limited. We could only raise them to the maximum of their particular potential, but we were completely unaware of the potential of the schizophrenic group, and hence we were delighted to find at a very early stage that 8 patients were ready for leave in the outside world.

THE PROBLEMS

We encountered many unexpected problems in this project, not the least of which concerned the staff. The unusual anomaly exists of highly skilled and intelligent seniors who came to the mental hospital service during the pre-war period, and who over the years had tended towards a custodial orientation. They had to re-adjust to this new regime. The juniors were an ever-changing nomadic group not particularly interested as a whole and could not easily be moulded to an understanding of the objects

of the project. Therefore a considerable burden revolved around the 2 seniors in the experiment, who not only had to adapt to a new outlook but also had to carry their pupils.

In the experience of one of the writers, in a previous project in the Fort Napier Hospital, Pietermaritzburg, much energy was directed towards initially preparing and re-educating the staff from their purely custodial outlook to the more progressive therapeutic approach. The writers believe that this was the fundamental factor enabling 4 wards to become progressive in their outlook without hostility from those looking on.

In the present scheme an enormous amount of anxiety was engendered in those who were landed in this new role requiring an *understanding* which was possibly beyond their training. Not only had the seniors to cope with the fears of the ever-changing juniors, but they had the more invidious task of coping with the general mistrust and veiled hostility of their colleagues of the other wards. All change is resisted and the fear that these particular changes would entail an increase in what might be expected from them, both emotionally and materially in working hours, evoked this hostility and ridicule.

The most distressing problems occurred towards the end of the first phase when we found, much to our astonishment, that some of the patients were fit to go on leave. The most serious of them must be regarded as the estrangement which occurs after many years of incarceration.

Case 1. M. A. C., 44 years old, was a case of paranoid schizophrenia who had been in hospital for 9 years. He was an aggressive and violent individual of Latin temperament. When left to his own devices, he was able to conduct himself within certain limits in the hospital occupational therapy department. The slightest interference unleashed an outburst.

At the first rating he was marked 4, 2, 2, 3, 4, 2. At a rating 4 months later he scored 5, 4, 4, 4, 5, 4. He was receiving a maximum of 60 mg. Stelazine and had marked parkinsonian side effects.

At this stage we were convinced that he had developed insight into his condition and was capable of living under sheltered conditions outside the hospital. Unfortunately the estrangement of 9 years (*a*) between his wife and himself, (*b*) between himself and the outside world, was a gap too big to break without adequate preparation. His wife (who had accepted his permanent exclusion from her life) had remodelled her entire existence and was appalled at the thought of being burdened with a man who was now a stranger and of whom she had become afraid. Two weeks at home with this hostile attitude had adverse effects on him.

DISCUSSION

We have asked ourselves whether, if a placebo had been used instead of Stelazine in the schizophrenics, the same result could have been achieved. We are not sure. What we do know is that with the inadequate and limited nursing staff at our disposal, psychotherapy as such was at the lowest possible level. We needed a miracle drug to bludgeon some of our withdrawn individuals back into activity. Only at the cost of severe akathisia could we in some cases get the effects we desired.

Case 2. F. C., aged 41 years, was a hebephrenic, hospitalized for 7 years. He was apparently grossly deteriorated and demented. On his first rating he scored the absolute minimum of 1 for each item. He had to be assisted into the interviewing room, he was usually soiled, his conversation was meaningless and incoherent. He was completely out of touch with reality. At the end of 4 months he was rating a maximum of 5 in 4 items and 4 in 2 items. At this time he was on his maximum dose of 60 mg. Stelazine and he displayed marked parkinson-like side effects.

His sister (who was unmarried) and other members of the family began taking an active interest in him and for the first time in 7 years he was allowed home for weekends. Thought was being given to his possible employment under sheltered conditions at the time of writing.

As this paper was completed, F. C.'s Stelazine had to be stopped because of a temporary shortage of the drug. It was after some 3 days that he went to the Charge Nurse and asked her for a supply of Stelazine as he felt that he was beginning to relapse.

Case 3. An interesting comparison is a single patient, K. G., aged 41 years, a case of catatonic schizophrenia. He had been in hospital for 4 years.

This patient had been a highly efficient engineer. He was housed in the admission ward. This was a highly dynamic ward in which there was constant therapeutic activity, viz. insulin therapy, ECT, coming and going of new patients and the use of the hospital occupational therapy facilities were centred largely on members of this ward.

K. G. remained the only permanently withdrawn patient in this stimulating environment. He would spend the entire day face down under the wash-basin, deep in distorted and bizarre metaphysical ideas. It was known to us that we could produce a temporary relief of these symptoms by parenteral Largactil or Stelazine, but this method could not be maintained indefinitely and he refused stubbornly to swallow pills, with the inevitable returns of his symptoms.

Using Stelazine concentrate masked by half a tumblerful of orange juice he has reached the stage of full occupation in the hospital workshops. He is alert and in contact with those around him. Although he expresses a desire to return home, and considers that he is capable of earning a living outside, he is still lacking in insight into the pathological nature of his illness.

Arising out of the problems already discussed, it became abundantly clear that, to overcome these difficulties, a new approach would have to be introduced into the management of the patient. The breaks which seem so inevitable in the case of chronic patients must be avoided at all costs. Contact between husband and wife should be maintained. With the changing scene relatives must be kept in touch with one another. Our tragic experience with Mr. M. A. C., who was separated from his wife, must not be allowed to recur.

The difficulties of re-adjustments to a strange and hostile world can only be overcome by establishing 'half-way houses.'

In conclusion one might well ask is it, or was it, really necessary for patients to have reached so base a degradation. Does the answer lie in the development of out-patient facilities, the maintenance of family ties and the treatment of the patient in home circumstances for as long as possible. The Worthing Scheme of Josua Carse seems to point the way.

SUMMARY

A multifactorial therapeutic approach in the opening of chronic wards was attempted.

A deteriorated ward comprising 65 patients was used. Thirty-three were schizophrenics and were put on to graded doses of Stelazine.

Occupational therapy comprising outdoor working parties and indoor construction of simple articles was established.

A rating scale to assess any change in patients' behaviour was used.

At the end of 6 months there was a generalized improvement in all the patients treated; 8 patients were fit to leave hospital in the care of their relatives.

This article is submitted for publication with the kind permission of the Commissioner for Mental Hygiene, Dr. B. P. Pienaar.

We would also like to thank the Smith, Kline and French Laboratories for supplying us with an adequate quantity of Stelazine.

Our special thanks are due to Charge Nurse Sumner and Male Nurse Venter and the other members of the Male Nursing Staff at Sterkfontein Hospital.

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ORTHODYRSARTHRICS

'IDIOPATHIC' AND 'ADOLESCENT' SCOLIOSIS

PHILIP H. DALGLEISH, M.B., CH.B. (EDIN.)

Hill Crest, Natal

For reasons given elsewhere,¹ an examination of the vertebral column is included in all physical examinations conducted in the author's general practice; except, of course, in conditions where a diagnosis of infectious or organic disease is obvious. One result of this innovation has been an increasing awareness of the existence of scoliosis in patients presenting a wide variety of conditions, ranging from backache through asthma to headache and autonomic symptoms such as vertigo, etc.

(In view of the present tendency to divide the vertebral column into regions and to use the term 'backache' to refer to conditions mainly in the lower spinal regions only, thus losing sight of the fact that the structure of the intervertebral joint complexes is fundamentally the same from coccyx to occiput, a more general use of the term 'spondylalgia' is suggested to describe the complaint of 'backache'.)

Scoliosis is usually classified as being either paralytic, congenital, infantile or idiopathic. Consideration of the first 3 types as presently accepted is outside the scope of this paper. They have received adequate attention elsewhere and, in the words of a *Lancet* Leading Article:² 'The history of the treatment of scoliosis is largely the history of orthopaedics itself. . . .'

'Idiopathic' is defined as: 'Not dependent on a known or recognized cause.' (Gould's Dictionary). Thus the use of the term to cover the residuum of cases not included in the first 3 classes in itself implies a neglect of this particular type of scoliosis. There is a grave danger that, wherever this term is used, such use connotes a rejection of the challenge implicit in the term itself. No condition is without a cause; such cause must lie within the laws of anatomy, physiology and pathology. If present knowledge of these laws offers no explanation, further search must be made. The use of the term 'idiopathic' merely avoids the challenge to extend the knowledge of the laws concerned.

As is frequently the case in Medicine, with its highly developed research organization and apparent interest in mechanisms rather than causes, this challenge appears to have been overlooked. This oversight is no doubt in part

due to the fact that research, both academic and clinical, is limited by the material at its disposal and to which its attention has been drawn. The material available for study in these influential fields inevitably consists of the more chronic type of case, chronic being used in this connexion to denote cases presenting disabling pain or gross deformity.

Research is thus directed inevitably at the correction, or prevention of deterioration, of the presented condition, rather than at the elucidation of its cause.

Infantile scoliosis is normally self-correcting; the treatment of congenital and paralytic scoliosis is accepted as being essentially reparative and supportive, but the condition of 'idiopathic' scoliosis requires, firstly, the postulation of an aetiology and, secondly, the application of treatment directed at the correction of its cause, with consequent prevention of irreversible pathological changes and a resultant state of chronicity.

It is here suggested that the time is more than ripe for the term 'idiopathic' scoliosis to be dispensed with, for the distribution of the cases now so labelled among the other groups, or for the creation, on more precise aetiological grounds, of a more accurate classification. This re-classification can only be based on manifestations of the condition which have not previously been given the attention they deserve—manifestations which only infrequently come within the purview of the academical and the research worker, but which are frequently seen in general practice. Here they are too often regarded as being of little importance and, somewhat complacently, labelled 'idiopathic' or, in certain cases, 'adolescent.' The latter term serves to perpetuate the impression that they are of transitory nature and therefore unimportant.

D. C. *aet.* 13, a keen footballer, complained of increasing 'lack of wind.' Examination revealed a gross scoliosis with approximation of the lower ribs to the iliac crests. Measurement, in the erect position, revealed that his left leg, from iliac crest to the ground, was about half an inch shorter than his right. Adjustment of his left shoe was advised but his parents, on hearing that he had a 'twisted spine,' insisted on his consulting an orthopaedic surgeon. The latter reported that the boy had 'an adolescent scoliosis of no ultimate significance,' and prescribed

exercises. Questioning of the boy revealed that his legs had been measured in the recumbent position.

It is submitted that though the accepted practice of measuring leg length (from the anterior superior spine to the malleolus in the recumbent position) is adequate for the diagnosis of fracture or dislocation, it is useless for measuring the operative or functional length of the leg. The legs must be considered as the supports of a solid structure, the pelvis, which supports a flexible structure, the vertebral column.

sating for the displacement. This over-compensation is again corrected by a similar mechanism operative in the mid-thoracic region. A scoliotic condition will thus be achieved which will be conditioned by the degree of tilting of the pelvis. This, in turn, is primarily dependent on the relative operative length of the legs (Fig. 1).

The result of such scoliosis on the joints of the intervertebral joint complexes and the intercorporeal joints is obvious. The neuro-central,

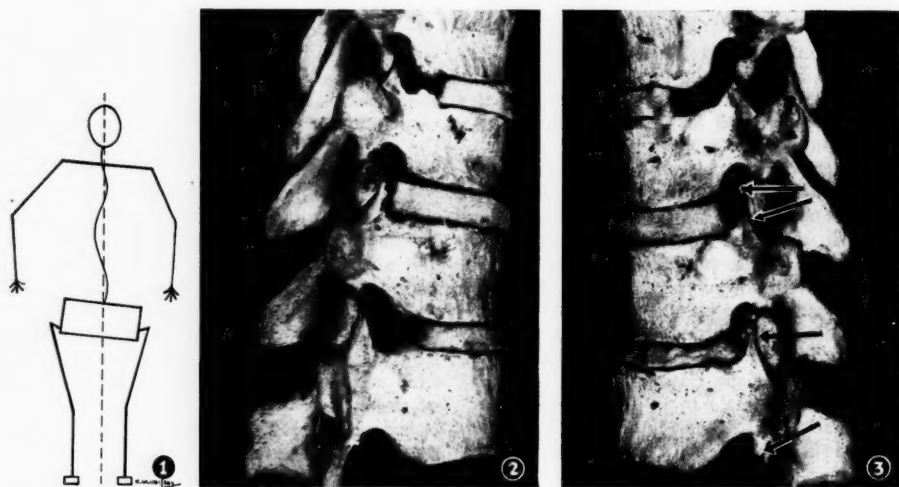


Fig. 1. The mechanism of scoliosis formation when the cause is shortness of one leg compared with the other.

Figs. 2 and 3. Showing the effect of scoliosis on the zygapophyseal joints. Fig. 2 shows the right, the concave side; and Fig. 3 the left, convex side of the spine.

(The reconstructed skeleton from which the above are taken has a short left leg. Osteo-arthritic changes are shown therein by ossification of the sacro-iliac joint and lumbo-iliac and lumbo-sacral ligaments on the left side and also in the lumbar, lower thoracic and cervical regions.)

Consideration of the anatomical and mechanical relationships of the lower limbs, the pelvis and the vertebral column will make the cause of scoliosis clear.

The vertebral column is erected on the pelvis which is in turn supported by the lower limbs. The fifth lumbar vertebra is firmly anchored to the sacrum and ilia in a position directed at right angles to the plane of the pelvis, the latter being normally horizontal. Any tilting of the plane of the pelvis due to shortness of one or other of its supports, is reflected in the angle subtended to the horizontal plane by the lower lumbar vertebrae. In an effort to maintain the head in the line of the centre of gravity of the trunk, the vertebral column tends to bend towards and over this line, thus over-compensating for the displacement.

This over-compensation is again corrected by a similar mechanism operative in the mid-thoracic region. A scoliotic condition will thus be achieved which will be conditioned by the degree of tilting of the pelvis. This, in turn, is primarily dependent on the relative operative length of the legs (Fig. 1).

The result of such scoliosis on the joints of the intervertebral joint complexes and the intercorporeal joints is obvious. The neuro-central, zygapophyseal, costo-vertebral and costo-transverse joints will be affected according to whether they lie on the convex or concave sides of the curves. The joints on the concave side are compressed, their restraining ligaments and other related structures being relaxed, while those on the opposite side are opened up with stretching of their related structures. The disc of the intercorporeal joint is distorted as the direction of pressure is changed, with relative thinning of that structure on the side of the concavity. The costo-transverse and costo-vertebral joints are also distorted with consequent changes in the angulation of the structures composing them, i.e. the ribs.

If the scoliotic condition is allowed to continue, it will result in arthritic changes in the joints concerned with ultimate ossification of the capsule and ligaments. These changes produce immediate and ultimately permanent deformity of the intervertebral foramina and canals, causing pressure on, and deformity of, the nerve root, the result of which is the production of pain or other neurological signs and symptoms (Figs. 2 and 3).

The relationship of the spinal nerves, the rami communicantes and the sympathetic chain to the foramina and canals and to the constituents of the intervertebral joint complexes, renders them liable to interference and inflammation with consequent production of symptoms. These symptoms have in the past been all too frequently termed 'idiopathic' or 'functional,' because no precise enquiry has been made into their aetiology.

The postulation of the above aetiology for the causation of scoliosis and the pathological changes which accompany it, makes the consideration of such mechanism essential as a possible cause of any condition which presents as pain, local or referred, or any other symptoms, sensory or autonomic, which are attributable to nerve root inflammation (neurodicitis).

Conditions which may be produced by such mechanism include:

Persistent headache, unilateral or bilateral, from neurodicitis of cervical nerve complexes accompanying osteo-arthritis and osteophyte formation produced by scoliotic deformation of the cervical spine.

Painful neck, shoulder and arm, unilateral or bilateral, frequently nocturnal or diurnal, depending on the effect of posture on the affected nerve roots.

Precordial and intercostal pain, due to deformation of costo-vertebral and costo-transverse joints and consequent neurodicitis.

Asthma. In the experience of the author many cases of this condition for which no allergic basis can be found, and of some in which such evidence can be produced, are basically caused by thoracic neurodicitis as suggested by O'Donovan³ who, *inter alia*, writes:

'In a closer study of the spine it will be noted that the lateral flexion and rotation covers the area from which the sympathetic nerves emerge from the cord, namely from T1 to L2. We know that the bronchioles derive their nerve supply from the autonomic system. The vagus produces constriction of the bronchiole and the sympathetic causes it to relax. Without definite proof to the contrary, it may be possible that asthma is due to under-action of the sympathetic rather than to over-action of the vagus, to which it is often attributed. The pre-ganglionic sympathetic fibres take origin in the intermediolateral columns of the cord and pass out in

the anterior spinal nerves. Those distributed to the bronchi, synapse in the cervical ganglia. Acetylcholine is liberated at the terminals of the preganglionic fibres in the ganglia cells. This substance stimulates the excitator cells in each ganglion and causes the liberation of adrenaline at the endings of the post-ganglionic fibres in the bronchioles.

If for any reason whatever there is a diminution in the production of acetylcholine in the ganglion cell, one would expect a diminution in the amount of adrenaline in the nerve terminals in the bronchioles. . . . The sympathetic system is not powerful enough to cause relaxation of the bronchioles and this is overcome by the vagus and an attack of asthma follows. . . .

I believe that in asthmatic patients the sympathetic-adrenal system is continuously over-stimulated and exhausted, with the result that any physical or emotional effort catches the patient unawares and is liable to bring on an attack.

Many cases of asthma start at about the age of 2 years when the child is just beginning to assume the erect posture. Two of O'Donovan's cases come into this category. Cases 1, 2 and 3 below are similarly representative of many others in the author's experience.

Asthma is a common complaint among the scholars at a local Preparatory School of which the author is Medical Officer. All new boys are examined on first admission. These number about 30 at the beginning of each academic year. The reason for the frequency of this condition at the school is that parents send their asthmatic children there to be out of the humidity of the coastal belt. The school lies at a height above sea level of about 2,500 ft.

At the last entry 29 boys were examined for the presence of scoliosis *before* their previous history was known. Seven cases of scoliosis were found, all of whom were subsequently found to have an asthmatic history, and all of whom had one leg shorter than the other. They were treated for this abnormality and there has been no call to treat any case of severe asthma during the year.

It is fully appreciated that this finding provides no scientific proof of the culpability of scoliosis for the production of asthma, but it is submitted that such evidence cannot be ignored, nor can the fact that at this school, compared with a few years ago, there are very few boys who possess an inhalor for relief of their asthmatic attacks, this article being in the possession of far too many boys in the past.

The author has treated some 120 cases of asthma during the past 8 years, most of them in children. It has been noticeable that in a considerable number of cases physical signs have been confined to one lung or more obvious on one side of the chest. The significance of this finding was not realized until the import-

ance of scoliosis as a possible predisposing or precipitating cause of asthma was recognized.

It would appear that the mechanism postulated by O'Donovan is not far from the truth in a large number of cases of asthma in children, and the asthmatic child is the father of the asthmatic adult. It would seem that correction of any scoliosis found in an asthmatic child may well provide a prophylaxis against the asthma becoming a habit in adulthood.

Lumbar pain. Many cases of recurrent backache (spondylalgia) can be considered as having originated in the instability of the intervertebral joint complex due to scoliotic changes in the spine. (The author has personally been relieved of a persistent and recurrent lumbar spondylalgia by the correction of a short right leg. To maintain a position of semi-flexion, e.g. while operating, was impossible).

Cases 4, 5, 6 and 7 below are illustrative of a similar condition.

Vague Abdominal Pain, Apparent Gastric Syndromes, 'Sub-acute' Appendicitis, etc., Apparent Renal, Vesical or Cholecystic Conditions. In accordance with the mechanism of the 'arc of reference' postulated by Sinclair *et al.*,⁴ many instances of these conditions may be considered as being visceral manifestations of neurodociitis. They are frequently correctable by appropriate treatment of any scoliotic condition which may be present.

Is it beyond the bounds of possibility that some instances of peptic ulceration, particularly of recurrences following operative treatment, are due to a similar mechanism to that suggested by O'Donovan for production of spasm of the bronchioles? It is accepted that emotional strain and posture, e.g. in bus drivers, can play a part in such recurrences. The co-existence of a postural defect and a resultant partially exhausted sympathetic-parasympathetic-adrenal system may conceivably have manifestations previously unrecognized as being of such origin.

A minor degree of scoliosis may not be obvious on inspection, but is immediately revealed by radiological examination. The use of a suspended wire (as suggested by O'Donovan), of a wire incorporated in the cassette (as used by others) or a suspended beaded metal chain as used by the author, will reveal any minor degree of scoliosis.

The iliometer (an apparatus designed by the author for the comparison of operative leg lengths) can be used for the assessment of any shortening.⁵

CASE REPORTS

Case 1. A. H. D., *aet.* 12, suffered from infantile eczema until he was 2 years old. At about 7 he developed attacks of dyspnoea of the asthmatic type when he was emotionally over-strained. These attacks became more frequent and more intense when he was subject to the strain of unhappiness at school. The attacks were usually nocturnal and were more or less controlled by ephedrine compounds.

In 1956 examination of the leg length revealed a shortening of the right leg ($\frac{1}{4}$ inch) and a minor scoliosis. A heel-raiser was prescribed and worn over a period of 2 years. The attacks became much less frequent and he dispensed with the heel-raisers. Within 6 months he himself requested that he should have them refitted. There have been no further attacks of dyspnoea.

Case 2. P. v. Z., *aet.* 8, suffered from persistent attacks of bronchitis which developed into frank asthma. He had a scoliotic spine accompanied by a short left leg. Heel-raisers were provided, with almost immediate cessation of the asthmatic attacks. He is still occasionally subject to bronchitis, but he has had no asthma for 6 months.

Case 3. D. K., *aet.* 8, had a history very comparable to that of Case 2. He was treated similarly with an equally happy result.

Case 4. H. P., *aet.* 47, had suffered for years from recurrent attacks of dull, localized lumbar spondylalgia interspersed with acute incidents in which the pain was agonizing, more than sufficient to cause complete disability. Numerous recumbent X-rays revealed no abnormality or, alternatively, the presence of a 'disc', depending on the attitude of the person reading the films. One orthopaedic surgeon advocated spinal fusion.

An erect X-ray revealed a scoliotic condition and measurement a short right leg. A heel-raiser was prescribed. The patient has suffered only one acute attack in the past 4 years and that was immediately relieved by suitable manipulation.

Case 5. G. E. G., *aet.* 53, had learned to live with a constant lumbar spondylalgia. He had received no help from the numerous opinions which he had obtained. Erect X-ray revealed a chronic scoliosis with considerable osteo-arthritis. His left leg was $\frac{1}{2}$ " shorter than the right. His heel was suitably adjusted and he was subjected to traction accompanied by general manipulation with the object of 'loosening up' the spine. His pain gradually subsided and he has been free for a year.

Case 6. A. J. D., *aet.* 50, suffered from recurrent attacks of lumbar pain with which, like Case 5, he had learned to live. The 'iliometer' revealed a difference of $\frac{1}{4}$ " between the 2 legs. Correction of the deformity and manipulative 'loosening up' have resulted in the disappearance of all his symptoms. His wife reports that 'He gets out of his car like a 2-year-old.'

Case 7. V. L., *aet.* 63, 'ricked his back' while gardening. He admitted that this was a regular occurrence but no one had been able to help him. He had a scoliosis with considerable osteo-arthritis changes, and a leg difference of $\frac{1}{4}$ ". Correction of the deformity with a course of traction and gentle manipulation have made him a much happier man.

These cases are typical of many which have occurred in one general practice. It is reasonable to assume that they are equally common in others. It is therefore submitted that all

cases presenting the symptoms listed earlier should be specifically examined for the presence of scoliosis. If this is present the possibility of its being caused by a difference in leg length should be considered. If found, this should be corrected by the provision of heel-raisers, or adjustment of the height of the heel of the shoe. A heel-raiser consists of a pad of sponge rubber of appropriate thickness covered by leather and is fitted inside the shoe. Some over-correction in the early stages is permissible.

It is essential that all pairs of shoes in immediate use by the patient should be so treated (including bedroom slippers, football boots, etc.). The patient should be strictly forbidden to walk barefoot, a common habit in South Africa. In long-standing (particularly adult) cases, a course of spinal traction accompanied by *gentle* manipulation should be prescribed. Such manipulation should never be performed under an anaesthetic. (Such violent and uncontrolled manipulation may well initiate further osteo-arthritic changes).

It is then submitted that many cases of so-called 'idiopathic' or 'adolescent' scoliosis will, on further investigation, be found to be due to the possession of one short leg. Strictly they will therefore come under the heading of congenital scoliosis. It is further suggested that many syndromes previously neglected or dealt with palliatively under the above inadequate heads will be found to be amenable to treatment by the simple expedient of treating the congenital abnormality.

NOTES AND NEWS : BERIGTE

Mr. A. E. Laubscher, B.Sc., M.D., Ch.M., Specialist Surgeon, has moved to 1016 Rand Central, Jeppe Street, Johannesburg. (Telephone: 22-2344).

* * *

Dr. Morris H. Berk, M.B., Ch.B., D.A. (R.C.P. & S.) Eng., has joined in specialist practice Drs. Samuel Hoffman and Louis Shubitz, Anaesthetists at 705 Harley Chambers, Jeppe St., Johannesburg. (Telephones: Rooms: 22-5309; 22-2040; Residence: 40-3749).

* * *

SECOND SOUTH AFRICAN CONGRESS OF PHYSICIANS

FIRST MEETING OF ENDOCRINE SOCIETY OF SOUTH AFRICA

The Second Scientific Congress of the Association of Physicians of South Africa will be held in Johannesburg from 6 to 9 July 1960, in conjunction with the First Scientific Meeting of the Endocrine Society of South Africa.

The meetings will take place at the Medical School of the University of the Witwatersrand.

SUMMARY

Argument for the reconsideration of the terms 'idiopathic' or 'adolescent' scoliosis is adduced and the suggestion made that many conditions so labelled are, in fact, of congenital origin, in that they are due to the possession of one short leg.

Illustrative cases are presented and the suggestion made that examination of the spine, in the erect position, should be carried out and the operative length of the legs ascertained before attributing certain syndromes (including headache, spondylalgia, etc.) to 'idiopathic' causes, and that asthma and certain apparently visceral conditions may be caused by the presence of a scoliotic condition. These conditions may well be due to neurodocitis caused by scoliosis.

I am grateful to Mr. R. Stewart, A.R.P.S., of the Department of Medical Photography, University of Natal, for photographic assistance; and to Mrs. K. Wolfson, of the Department of Social, Preventative and Family Medicine, University of Natal, for Fig. 1.

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ELI LILLY MEDICAL RESEARCH FELLOWSHIP (SOUTH AFRICA)

ESTABLISHED BY THE CAPE TOWN POST-GRADUATE
MEDICAL ASSOCIATION

1. Applications are invited from suitably qualified medical practitioners for the Eli Lilly Medical Research Fellowship (South Africa).

2. The Fellowship is for the purpose of medical research and is not intended for post-graduate clinical study. It is available for one year.

3. The value of the Fellowship is 3,600 United States dollars for one year and, in addition, travelling expenses will be allowed, based on a travel budget to be submitted by the Fellow. This will cover the cost of travel and incidental expenses from the place of residence of the Fellow to the approved place of study in the United States of America, as well as the return journey.

4. Other things being equal, preference will be given to candidates under 40 years of age.

5. Any medical practitioner registered in South Africa will be eligible for this award.

6. There will be no discrimination for the award on grounds of race, colour, creed or sex.

7. The candidate must submit evidence of his capacity to do original research work.

8. The candidate must submit a programme of the proposed research. He is advised to submit an alternative scheme in case of difficulties about the first one.

9. It is advisable for the candidate to indicate at what institution he proposes to undertake the research and he should also state whether he is in a position to make any arrangements to carry out the research at the proposed institution.

10. The successful candidate must undertake to return to South Africa for a period of at least two years after the termination of the award.

11. The Selection Committee consists of:

Dr. H. Brown (*Cape Town*);
 Prof. F. Forman (*Cape Town*);
 Prof. I. Gordon (*Durban*);
 Dr. A. Landau (*Cape Town*);
 Dr. D. P. Marais (*Cape Town*);
 Dr. L. Mirvish (*Cape Town*);
 Prof. S. F. Oosthuizen (*Pretoria*);
 Mr. G. Sacks, F.R.C.S. (*Cape Town*);
 Dr. G. Selzer (*Honorary Secretary, Cape Town*);
 Dr. H. A. Shapiro (*Honorary Chairman, Johannesburg*).

12. Applications must be forwarded to:

Dr. H. A. Shapiro (*Honorary Chairman*),
 Selection Committee, Eli Lilly Medical Research
 Fellowship (South Africa)
 P.O. Box 1010, Johannesburg.

They must reach him not later than 30 April, 1960.

They should be concise, and accompanied by the names of not more than two suitable referees. Testimonials must not be included.

COLLEGE OF GENERAL PRACTITIONERS

NATAL COASTAL FACULTY

The Natal Coastal Faculty of the College was officially launched on 8 March, at an inaugural meeting consisting of the eleven Foundation Members.

The following were elected in official capacities on the Board:

Chairman: Dr. E. W. S. Deale.

Vice-Chairman: Dr. D. Martyn.

Honorary Secretary: Dr. M. B. Asherson, 53 Medical Centre, Field Street, Durban.

Honorary Treasurer: Dr. L. Wolfowitz.

Committee: Drs. M. Byala, M. Berkowitz, P. H. Dalgleish, M. D. Messent, B. Morris, R. Mundy, F. Stern.

The official representative on the London College is Dr. E. W. S. Deale.

FIRST INTERNATIONAL SYMPOSIUM ON CYBERNETIC MEDICINE

The first International Symposium on Cybernetic Medicine, organized by the International Society of Cybernetic Medicine, will be held in Naples (Italy), 2-4 October, under the presidency of Prof. Aldo Masturzo of Naples University.

General theme of the Symposium: *The Introduction of Cybernetic Methods in Modern Medicine.*

Official speakers:

1. Prof. Norbert Wiener (*Director of the Department of Mathematics, Massachusetts Institute of Technology, U.S.A.*);

2. Prof. Paul Nayrac (*Director of the Neuro-psychiatric Department, University of Lille*);

3. Prof. S. T. Bok (*Director of the Institute of Brain Research, University of Amsterdam*);

4. Dr. Giuseppe Foddis, Engineer (*Director, S.E.T., Naples*);

5. Prof. Minoru Kono (*Director of the Institute of Medical Research, Tokyo*).

Receptions, trips to Pompei, Sorrento and other points of interest near Naples, round panels, and exhibits of Cybernetic machines of medical interest are being organized.

The complete list of speakers and prospective changes in schedule will appear in the definitive programme.

Those wishing to participate in the Symposium should send, by 30 June 1960, registration fee (10 dollars) and submit titles of communications to:

Prof. Renato Vinciguerra, Secretary S.I.M.C., Via Roma, 348—Naples (Italy).

* * *

THE MAURICE WEINBREN AWARD IN RADIOLOGY

1. This Award consists of a Certificate and a prize to the value of £25.

2. It will be made annually (in respect of a calendar year) for a published paper of sufficient merit dealing either with radiodiagnosis or radiotherapy.

3. The Award is restricted to medical practitioners registered in South Africa, but the paper may have appeared in any medical journal published in South Africa, or in the *British Journal of Radiology* or the *Journal of the Faculty of Radiologists*, London.

4. The Selection Committee may change or add to the names of the journals in which candidates may have published papers submitted for consideration.

5. Authors who wish to be considered for this Award must advise the Honorary Secretary of the Selection Committee to this effect by 31 December each year.

6. They must provide 6 copies of the paper submitted for consideration not later than the end of February in the succeeding year.

7. The Selection Committee consists of:

Prof. S. F. Oosthuizen;

Dr. Harris Jackson;

Dr. M. H. Fainsinger;

Dr. T. Fichardt;

Dr. J. N. Jacobson, and

Dr. H. A. Shapiro (*Acting Honorary Secretary*).

The address of the Acting Honorary Secretary is:

Dr. H. A. Shapiro,

P.O. Box 1010,

Johannesburg.

8. Members of the Selection Committee are not eligible for the Award.

9. The decision of the Selection Committee, in connexion with the making of an Award, is final and binding.

SKF LABORATORIES AWARD FOR POST-GRADUATE CLINICAL STUDY IN SOUTH AFRICA

1960 FELLOWSHIP

This award has been established by a grant from SKF Laboratories (Pty.) Limited, P.O. Box 784, Port Elizabeth. This is the South African branch of Smith, Kline and French Laboratories Ltd., London.

The Selection Committee (an entirely independent board of medical practitioners) consists of the following:

Prof. J. F. Brock (*Cape Town*);
 Prof. E. H. Cluver (*Johannesburg*);
 Prof. G. A. Elliott (*Johannesburg*);
 Prof. J. H. Louw (*Cape Town*);
 Dr. H. A. Shapiro (*Honorary Chairman, Johannesburg*);
 Dr. M. Shapiro (*Johannesburg*);
 Dr. M. M. Suzman (*Johannesburg*);
 Prof. H. W. Snyman (*Pretoria*).

Applications are invited from registered *general practitioners* who have been in active practice in South Africa for at least 7 years.

The Bursary is intended for post-graduate clinical study and not for medical research. It is available for not less than a 2-month period at any Medical School in South Africa.

The total value of the Bursary is £300.

The candidate must submit a brief statement of his proposed course of study and indicate the institution at which he intends to undertake it.

No payments will be disbursed to the successful applicant until he has satisfied the Selection Committee that he has been accepted for the period of post-graduate study at a South African Medical School.

Applications must be made on the prescribed form which is obtainable from:

Dr. H. A. Shapiro (*Honorary Chairman*),
 Selection Committee,
 SKF Laboratories Award for Post-Graduate Clinical Study,
 P.O. Box 1010, Johannesburg.

Closing Date for Applications: 30 June, 1960.

DIHYDROSTREPTOMYCIN AND IMPAIRED HEARING

In an article published in *J. Amer. Med. Assoc.*, **170**, 1657 (August), 1959, it was emphasized that impairment of hearing may not begin until sometime after dihydrostreptomycin has been used, that such loss of hearing may be irreversible and that it may be induced by very small quantities of the drug.

There is no evidence to indicate that there is any major therapeutic advantage in using dihydrostreptomycin rather than streptomycin.

The United States Food and Drug Administration announced its decision to discontinue the certification of all combinations of penicillin and dihydrostreptomycin, effective from January 1960. However, materials which have been certified may be offered for sale until stocks have been exhausted.

Penicillin-dihydrostreptomycin combinations and dihydrostreptomycin sulphate have already been withdrawn voluntarily in the U.S.A. by pharmaceutical manufacturers.

* * *

THE NUTRITION SOCIETY

ADVANCE NOTICE OF 134TH MEETING

A symposium will be held at Rothamsted Experimental Station, Harpenden, Herts., on Saturday, 2 July 1960 on

Food Losses in Field and Store

Chairman: Mr. N. W. Pirie, F.R.S.

Mr. F. G. W. Jones: (Rothamsted Experimental Station) *Root Damaging Nematodes*.

Mr. M. J. Way: (Rothamsted) *Crop Damage by Insects and the Problem of Control*.

Mr. G. V. B. Herford: (A.R.C. Pest Infestation Laboratory, Slough) *Insect Damage to Grain During Storage*.

Mr. E. C. Large: (M.A.F.F. Plant Pathology Laboratory, Harpenden) *Virus Damage to Potatoes*.

Mr. F. B. Leech: (Rothamsted) *Losses Through Animal Diseases*.

The titles of papers are not necessarily in final form. Further information may be obtained from:

D. F. Hollingsworth (*Honorary Programme Secretary*), c/o Ministry of Agriculture, Fisheries and Food, Great Westminster House, Horseferry Road, London, S.W.1, England.

PREPARATIONS AND APPLIANCES

BACICORT TOPICAL AND OPHTHALMIC OINTMENT

M. L. Laboratories announce the release of *Bacicort* Topical and Ophthalmic ointment, and supply the following information:

Bacicort ointment combines in a greasy base Hydrocortisone and two antibiotics, neomycin and bacitracin.

The use of neomycin and bacitracin gives *Bacicort* a wider antibacterial range embracing both gram negative and gram positive organisms.

The addition of hydrocortisone ensures prompt relief of inflammatory conditions and the reduction of oedema, thereby producing immediate benefit and relief, and in the case of ophthalmic use providing protection against functional damage.

Bacicort has been found to be of great value in the following conditions:

Seborrhoeic dermatitis; Adult and infantile eczema; Otitis externa; Contact dermatitis; Pruritus

vulva and ani; Eye diseases caused by trauma, infection and allergy.

Treatment is most beneficial in acute and self-limiting conditions.

Bacicort is supplied in tubes of 5 g. and 20 g. in 2 strengths as follows:

Bacicort Topical and Ophthalmic Ointment 1.25% (5 g. and 20 g.)

Hydrocortisone	1.25%.
Neomycin	0.5%.
Bacitracin	500 µ/g.

Bacicort D.S. Topical Ointment 2.5% (5 g.)

Hydrocortisone	2.5%.
Neomycin	0.5%.
Bacitracin	500 µ/g.

For further information please communicate with: M. L. Laboratories, P.O. Box 2368, Johannesburg. (Telephone: 24-8981).

CORRESPONDENCE

USE OF RADIUM

To the Editor:

I write by direction of my Board to draw the attention of your readers to the fact that no person may hold and use radium or any of its disintegration products without the written permission of my Board. This provision came into force as a result of an amendment to the Atomic Energy Act in 1958.

Medical practitioners who are in possession of radium must apply immediately to the Board for the necessary authority to hold and use radium. At present only Radiologists who are on the Specialist Register of the S.A. Medical Council are authorized to use radium.

Secretary,
Atomic Energy Board.

Private Bag 256,
Pretoria.

THE TARIFF OF FEES FOR APPROVED MEDICAL AID SOCIETIES AND ITS SIGNIFICANCE FOR THE PROFESSION

To the Editor: The Medical Services Plan is lucky to have weathered its first half-year so well (*Progress Report*, this Journal, 13 February 1960), but it would be unwise to count on expenditure remaining so low even if no 'calamity' happens. Mr. Parvus anticipates an early refund of their loans to participating doctors. The reverse is more likely and the doctors asked to put up more money when the plan gets into its stride unless the *Tariff of Fees* is radically changed.

In the light of the actions of the insurance companies referred to in the *Report*, it should be clear that their medical aid schemes are not paying. One company is refusing to enrol more members. No business would voluntarily limit its profits and one is bound to infer that it is making no profits. The other company has reduced the indemnity cover of its scheme's members which can only mean that its scheme is showing a loss.

I am convinced that a scheme whose only income is from reasonable membership fees and has no other source of subsidy, cannot last for any length of time on the present *Tariff*, although this is supposed to be preferential. The reasons will become evident when I discuss the *Tariff* in detail presently.

THE TARIFF OF FEES FOR APPROVED MEDICAL AID SOCIETIES

I have in my possession the 3 most recent editions of the *Tariff of Fees for Approved Medical Aid Societies* (henceforth referred to as the *Tariff*, or the *Tariff of Fees*, or the *Approved Tariff*) issued by the Medical Association of South Africa and authorized by the Federal Council of the Medical Association of South Africa, viz. that of 1955 (which is a revised and amended version of the 1952 issue), that of 1957 and that of 1959 (which is an amended and corrected edition of the 1957 issue). We are really concerned only with the current (1959) edition, but the earlier issues are of interest as they show at what value the professional services of general practitioners were (as they still are) assessed by the Federal Council.

In 1955 the authorized consultation fee for G.P.'s was exactly what I charged (then the recognized fee) when I started practice in an O.F.S. village in

1922. The services of physicians and paediatricians were considered to be worth 6 times as much. In 1957, when fees were raised, G.P.'s jumped from 10s. 6d. to 12s. 6d., or less than one fifth, while physicians' and paediatricians' fees rose from 3 to 4 guineas, or one third. Put another way, the rise of a guinea as against 2s. was exactly 10½ times as much. Surely it is with your tongue in your cheek that you speak (in your *Editorial* of 11 July 1959) of 'the universally accepted principle of the pivotal importance of the family doctor in the community.' Who wants to be of pivotal importance if that is the way it is recognized?

In the current edition of the *Tariff* the only allowance for time is the fee for time spent in travelling by public transport. The fee allows the specialist £5 5s. for the first hour and £4 4s. for each subsequent hour; the general practitioner is paid £4 4s. and £2 2s. You will note that the G.P., whose active services are worth less than one sixth of his learned colleague's, becomes half as valuable when he is doing nothing.

The *Tariff* does not provide for time spent on minor investigations such as urine testing, taking blood pressures, blood smears or specimens, taking throat swabs and other time-consuming procedures; even catheterization seems to be included in a general practitioner's 12s. 6d. consultation fee.

Time is an important factor in the family doctor's armamentarium; the essence of his work lies in his leisureliness, his readiness to watch and wait and comfort. He must sit by a baby with croup, doing all he can to ease its strident breathing, ready to do a tracheotomy if there comes the need. He cannot afford to do that for medical aid beneficiaries because no provision is made in the *Tariff* for time spent at a bedside. There is little time enough, in all conscience, to make ends meet on 12s. 6d. and 15s. fees. He knows it is better for the baby to stay with its parents and a lifetime of precedent may forbid him to leave, so he waits, perhaps all night, until it is breathing freely again. At the end of the month he renders an account for £5 5s. and specifies it as

'Croup. All-night (8-hour) vigil.'

When payment arrives it is a cheque for £1 5s. accompanied by a stereotyped slip stating:

'Fee altered in accordance with the *Tariff of Fees for Medical Aid Societies*.'

Perhaps it did not occur to the secretary that even at £5 5s. his society got off lightly. If the baby had been sent to hospital it would have entailed (not using an ambulance):

Paediatrician (after hours) £6 6s. and visit the following morning £1 11s. 6d. and bed £1 15s., a total of £9 12s. 6d. if the child was kept only one night. If secretaries of medical aid societies would only interpret the *Tariff* more liberally and less literally, they would keep the doctors' goodwill and save a lot of money.

THE TARIFF'S EFFECT IN ELIMINATING THE FAMILY DOCTOR

The compilers of the *Tariff* could never have intended it to be more than a professional price-list: but, though I am sure they never realized it, they were forging a powerful instrument for the elimination of the family doctor. Their low estimate of the worth of his services and their failure to provide for time have forced him to make haste in his work and so make a travesty of his true role. They

must have confused general practitioners with panel doctors whose rooms are always crowded with people wanting prescriptions for aspirins, castor oil, Gee's linctus, teething powders, *etcetera*. The result is that those of us who are not too old to change are being driven into other departments of medicine and newly qualified doctors are discouraged from making general practice a career. It is only a matter of time (and not a long time either) before the family doctor disappears—*unless the Tariff is changed now*.

FIXED FEES FOR A PROCEDURE

Fixed fees for the same procedures can be unjust if circumstances are not taken into account. Tracheotomy provides the best illustration because so often it must be done urgently and on the spot. The *Tariff* recognizes this and Item 9 of the *General Rules* makes provision for it. Item 9 reads:

In exceptional cases, where the *Tariff* as laid down could not possibly cover the services rendered by the general practitioner, the Medical Aid Societies will be prepared to give consideration to such cases when notified as soon as reasonably possible. Conversely, if the fee in the *Tariff* is disproportionately high in relation to the actual services rendered, a lower fee than that in the *Tariff* should be charged.

That Rule has its counterpart at the top of each Section which reads:

Practitioners are reminded that a lower fee than that appearing in the *Tariff* should be charged where the practitioner would have reduced his fee in private practice. Prolonged or exceptional cases should also receive special consideration in accordance with the usual medical practice.

The naïve faith in human nature of the authors of those rules is touching, but I will take off my hat to the secretary of any medical aid society who can prove that he sanctioned a higher fee for a service than that laid down in the *Tariff* and I will eat it if any doctor can honestly say he ever charged a society less than he *knew* he was entitled to charge. In fact, however well-intentioned they may be, those rules are no more than eyewash.

To revert to fixed fees for procedures, consider the following case (which is not entirely hypothetical):

A doctor is called to a child choking to death with oedema of the glottis caused by a mouthful of scalding tea. He acts at once and cuts the living flesh of the moribund patient. When the child takes a grateful breath through the tracheal opening, it inhales the welling, blackish blood which it coughs out again all over the doctor's face and clothes. Now the doctor pushes into the opening a cut-down tube stem, or the valve housing torn from a bicycle tube, or any other hollow instrument that comes to hand, and sends the family to ring for an ambulance and search the neighbourhood for pipe-cleaners, fowl feathers or anything else that could be used to keep the airway open. He accompanies the patient to hospital in the ambulance holding the improvised tracheotomy tube in place and doing his best to keep it clear of mucus.

At the hospital he finds the theatre occupied by a surgeon performing a tracheotomy and has to wait. The surgeon has an anaesthetist to administer a local, a nurse to hand up instruments and swabs, another nurse to operate the suction while a third stands by with the oxygen trolley. As soon as the tube is in and the tapes tied he peels off his gloves, discards his mask and gown and retires to the

doctors' room for a cup of tea, satisfied with the £20 fee he will receive for 10 minutes work. On the other hand, his blood-bespattered colleague leaning over the child on a trolley in the passage has not as yet had time to think of the £13 he will be paid for his effort, which will include a standard tube stitched in to make it fit snugly.

OTHER DEFECTS IN MEDICAL AID SCHEMES

I do not mean to be carping. On the contrary, I want to be constructive. I want to indicate what I consider defects in medical aid so that they can be remedied. There are two that I have mentioned already and which will keep on recurring all through this letter.

The first is that a general practitioner cannot afford (on *Tariff* fees) to diagnose or treat any patient whose ailment is the least bit obscure, with the result that all such patients are referred to specialists.

The second is that with the *Tariff* as it is now constituted, it is impossible for any medical aid society or scheme, by whomsoever it be sponsored (even a commercial insurance company), to be the glorious ramp that you seem to think it is (*Editorial*, 11 July 1959).

The moment a patient leaves the hands of the family doctor, costs go rocketing. It is not that the specialist does more than he should—he does only what he has been taught to do or what he is used to doing, and the investigations that he sets in train may cost multiples of his own adequate fees.

There are two schools of medicine or, let us rather say, two approaches to a disease: the positive and the negative. The positive approach takes intelligence, perseverance, deductive power and a personality robust enough to risk making a mistake. The physician comes to a firm diagnosis on clinical evidence only and then confirms it with a single, extraneous investigation. He scorns laboratory or radiological assistance before he has arrived at his final conclusion. The negative approach is used by physicians who lack self-confidence and have not the moral courage to risk being wrong. They make a tentative diagnosis and then compile a list of every other possibility, what we usually term the differential diagnoses. These they exclude one by one by radiological, biological and bacteriological investigations before making up their minds. The positive physician gets good results economically, but is considered by nurses (and consequently the general public) to be old-fashioned; the negative physician also gets good results, but in the process can bankrupt a paying patient in one illness and a medical aid scheme if he treats enough of its members. He is labelled by the nurses as 'so careful, he never takes a chance.'

DIFFERENTIAL FEES FOR SPECIALISTS AND GENERAL PRACTITIONERS FOR IDENTICAL PROCEDURES

A striking and misleading anomaly in the *Tariff* is the differential payments to specialists and G.P.'s for identical operations. If the G.P. has not skill equal to the surgeon's, it is against public interest for him to operate and he should be debarred from operating. On the other hand, if his skill is equal, he should receive the same fee. A layman interpreting the *Approved Tariff* might justifiably infer that it offers inferior surgery at bargain prices.

The right solution would be to remove from the *Tariff* all fees quoted for procedures, major or minor, performed by general practitioners. Every minor procedure and emergency major procedure falls within the scope of their activities and should not be paid for separately. Conversely, it should not be necessary for them to have to increase their earnings by doing major operations when there are specialists at hand ready and willing to take over the patients.

Before that solution can be adopted, consultation and visiting fees of general practitioners must be raised to a reasonable level. The man who is cut out by temperament and certain skills to become a general practitioner should be encouraged to do so by the knowledge that he will not have to sacrifice himself for the rest of his life or until he does further study to enable him to become a specialist. I am quite convinced that a general practitioner who does major operations to-day is driven to it by the meagreness of his legitimate fees. One never hears of a dermatologist enucleating an eye, or an ophthalmic surgeon amputating a leg, or a general surgeon removing a glioma. If specialists starve, it is not because their fees are inadequate.

INCONSISTENCIES AND ABSURDITIES IN THE TARIFF

The *Tariff* has gone through edition after edition, each one of which has been corrected, amended and revised, yet it still contains inconsistencies, absurdities and stupidities. I do not think I have found all that occur in the *Tariff*, but the following examples will illustrate all the categories:

According to Item 18, Section C, aspiration of a bursa is £1 11s. 6d. while Item 95 of Section S quotes £5 for the same procedure.

Item 10, Section Y quotes £2 2s. for an intra-articular injection with physiotherapy; Item 62, Section S quotes £5 for the injection alone.

Item 49 (b) of Section P quotes £5 for looking down a throat and Item 69 of Section L quotes £2 10s. for looking up a rectum.

Item 17 of Section G (which lays down the fees for intravenous infusions by paediatricians) quotes £5 5s. for a 'push-in' and £8 8s. for a 'cut-down'. To insert a needle into a vein, especially in a child, needs far more skill than to expose a vein by incision and insert a cannula; but there is a more cogent reason for encouraging a 'push-in' rather than a 'cut-down'—a 'push-in' leaves the vein undamaged while a 'cut-down' almost invariably renders the vein unfit for future use. (This is a mild example of what seems to be a basic rule in the *Tariff*, i.e. a knife in the hand is worth more than skill in the fingers, usually 3 times as much, but in at least one instance 5 times as much.)

It is a matter of common experience as well as common sense that the more finicky the operation the more difficult it is to perform, yet the *Tariff* pays £2 10s. for circumcizing an infant and £7 10s. for circumcizing an adult. More curious still is that the jump occurs on a child's second birthday.

According to Item 47 (a) of Section S a general practitioner's fee for reducing a dislocated shoulder joint is £8 (specialist fee, £12 10s.). Item 47 (b) of the same section rules that if the same patient dislocates again and consults the same doctor, the doctor can charge no more than a consultation fee for the reduction. The rule is irrational. Last year I reduced 2 medical-aid dislocated shoulders and if either of them consults me again for the same condition I shall either ask a colleague to do the

reduction while I give the anaesthetic (which will mean £8 for him and £4 4s. instead of 12s. 6d. for me) or I will send the patient to an orthopaedic surgeon, either of which will prove more costly than a sensible £5 that should have been offered for second and subsequent reductions.

OVERPAYMENT FOR MINOR PROCEDURES

Minor procedures are overpaid in the *Tariff*. I am going to deal with them in detail, clinical as well as general, because I have an idea that their overpayment was expressly fashioned in an attempt to offset the low fees prescribed for the main functions of general practitioners. I want to make it clear that it is not in patients' interests to tempt family doctors to perform minor operations in order to boost their inadequate earnings. To repeat what I said when discussing the performance of major operations by G.P.'s, the family doctor should never be paid ancillary fees for any procedure whatsoever, because all minor procedures fall within his scope and these include most dislocations without complicating fractures and most simple fractures that can be easily set.

We general practitioners of any experience have always regarded minor procedures as part of our routine on the principle that the family doctor's services, like honesty, are indivisible. Taking a thorn out of a foot, a bead out of a nostril, listening to a consolidated base or examining a soiled napkin are all one to us. Individual fees for individual services introduce an element of specialism that is foreign to the spirit of our part as family friend. There must be no question but that our actions are governed absolutely by the interests of our patients.

The *Tariff* introduces individual fees for individual actions.

Opening a quinsy, which is no more than a stab with a guarded knife and takes less time than syringing an ear, is worth £7 10s., or 12 consultation fees. One learns with experience that it is seldom that the abscess can be reached via the classical point of approach on the soft palate and that most quinsies open spontaneously into the pharynx even after the incision has been deep and adequate. When pus is reached it means that the abscess was ripe to the point of bursting and opening itself. The old saw that a cut quinsy ripens sooner, repeated religiously after every failed attempt, is just so much self-comforting nonsense. In the light of my experience it should be clear why I regard the additional fee for opening a quinsy as putting temptation in the family doctor's way to deviate from his main precept: the interests of his patient alone.

Opening a whitlow was always a normal part of a doctor's activities until the *Tariff* gave it independence. The earlier it is opened the better, so it offers no inducement to earn money at the patient's expense, but one does (or did) have scruples about charging £5 (the *Tariff* fee) for what is at worst (when the nail has to be removed) a small job and at best (snipping some skin made tense by creeping pus), negligible.

Lancing boils is one of the procedures included in the doctor's consultation fee, but if the boil happens to be in the aural canal and it is called a furuncle and the patient is given an anaesthetic, lancing it is worth £7 10s. (Item 34, Section P).

The oddments that children push into their noses and ears are legion. Their parents usually manage

to get them out with a hairpin or a tweezers, but not always, and then they are taken to the doctor. I have dealt with a good many and I do not remember ever having any particular difficulty in removing them; certainly I have never used an anaesthetic, nor have I ever charged more than my consultation fee. I imagine that all doctors consider removing foreign bodies from ears or noses as a normal part of their routine. Instead of feeling a pulse, looking at a tongue, listening to a heart and palpating an abdomen, the doctor pulls a melle out of a nostril and calls it a consultation. It takes no more effort or skill than diagnosing the measles, yet the *Tariff* pays £5 for pulling a melle out of a nostril and £7 10s. if it is done with an anaesthetic (Item 18, Section P).

Working on the lines of charging consultation and visiting fees only and including all procedures in those fees, which was always my habit, would be impossible on *Tariff* fees. If my only patients were medical aid (as may happen some day), I would have to see 6 to pay my daily surgery and car expenses and another 6 to keep my home going for the day and a further 6 for extras and savings to provide for illness (when I earn nothing) and old age. Who can see 18 patients and have 3 meals in a 16-hour day and still do justice to his work? Comparisons may be odious, but it will make my position clearer to say that on *Tariff* fees a physician who sees 3 patients in his rooms earns £1 7s. more than I receive for the 18 I attend; and for 3 visits he is paid £2 5s. more than I am paid for 18 visits; an anaesthetist working 2½ hours earns more than my fees would be for 18 visits or 22 consultations and a surgeon removing an appendix that takes him 30 minutes is paid exactly what I earn for 40 consultations.

The examples I have quoted to illustrate the idiosyncracies of the *Tariff* have by no means exhausted them and I commend you to study it for yourself. You will find some items amusing, such as number 3 of Section D which quotes 15s. for 'Autohaemotherapy, exclusive of cost of material,' some bizarre, such as 17 (b) of Section L, which quotes £40 for repair of an incisional hernia which may well be the gauche work of the surgeon himself at a previous operation; some ridiculous, such as 25 and 26 of Section P, which price the removal of a salivary calculus at £3 3s. by manipulation and £15 by operation; some pathetic, such as Item 25 of Section C, which lists procedures included in a G.P.'s fee of 12s. 6d.; and some tragic, such as most of Section M which, by quoting fees for general practitioners, seem to entitle anyone to dig around in the brain tissues of his patients.

The Medical Services Plan, which was prompted by the M.A.S.A. and sponsored by medical practitioners with whom it apparently keeps in close liaison, must have sensed that there was something off-balance in the *Tariff of Fees* and in an attempt to put it right raised it *in toto* by 40%. There you have an example of burning the house down to roast the pig but, unfortunately, when the pig is taken out it will be found to be very much alive. The raise does little to remedy the blunder of underpaying the services of G.P.'s and nothing to narrow the relative gap between the fees of G.P.'s and specialists, but actually increases the absolute difference in their fees. The visiting fees of G.P.'s go up by 6s. to a guinea, the specialists' by £2 2s. to 7 guineas. A guinea is still too little to allow more than a cursory interest in patients and the implication is still there that physicians

are worth 7 times as much as G.P.'s. It must be remembered that the whole income of most general practitioners is made from consultations and visits and the expenses of the two are much on a par. I do not resent the specialist fee of 7 guineas for a visit, but I do resent having to do 7 visits to earn (gross) what he earns in one; and I do resent having to refer many of my patients to him because I cannot afford to keep them. It is a different matter if I am not able to diagnose them, or when I can diagnose them do not feel competent to treat them, because then I refer them with pleasure and look forward to an instructive correspondence with my colleagues.

About 6 months ago a member of a commercial medical aid scheme brought his wife to see me. While they waited he felt a pain in the epigastrium. It was more a discomfort than a pain and he asked me to have a look at him. I found tenderness over McBurney's point, but there was no guarding. After I had seen his wife the pain had increased and I advised him to take her home and come back at once so I could watch him. An hour later his right rectus was guarding and his pulse was up and the pain had shifted to the right iliac fossa. I telephoned a surgeon to book a bed for an acute appendix and sent the patient in. The surgeon saw him a few hours later and removed a gangrenous appendix.

The diagnosis was easy and I have not gone into such detail to show what a clever fellow I am. My purpose is more practical and will be clear when I tell you that I received 15s. for my more than 60-minute vigil and the surgeon was paid £25 for his 25 minutes' work.

When I was a student in the medical wards at Guy's I was on the firm of Dr. X, a gentle, soft-spoken man who was no genius but (what is preferable in a physician) was a good diagnostician. His opposite number on the surgical side was Mr. Z, a man quite as convinced of his own infallibility as he was of his surgical capability. One morning Dr. X invited us to go with him to the surgical block to see Mr. Z do an interesting case which he had referred for operation. When the patient was under and the sheet was removed it was seen that he had been prepared for a gall bladder approach. Dr. X said to Mr. Z reproachfully:

'But Z, I sent him to you for an appendicectomy.'

'I know what I am doing,' boomed Mr. Z. 'I examined him and if he's not a gall bladder my name's not Z.'

No more was said. A minute later Z had the gall bladder between his fingers.

'You're right, X,' he said sheepishly, 'there's nothing wrong with this. I'll extend the incision and have a look at his appendix.'

'Yes, Z,' said X almost apologetically, 'I think you'll find the appendix attached to the sigmoid.'

Mr. Z hooked his finger round the appendix, pulled and delivered its base and on further traction out came its point grown fast to the sigmoid colon! How Dr. X arrived at that remarkable conclusion he never told us, but there it was.

I once knew a surgeon who had a large practice not only among the local population but also from the surrounding countryside. He was the despair and envy of his colleagues, whom he far outstripped in the amount of surgery he did. He had deft hands and a mediocre brain. His powers of diagnosis were not impressive and it was said that if he were asked the differential diagnosis of a floating kidney and a floating trophy he would take some time to

puzzle it out. Nevertheless, his practical capabilities were of a high order and if he were sent a movable kidney for operation he would perform a nephropexy second to none.

There was no secret about the secret of his success. He never sent accounts and he let it be known that it was immaterial to him whether his patients paid or not; but he charged up each operation just in case a patient wanted to pay. Most of them never paid, but their consciences drove them to discharge their indebtedness vicariously by extolling his prowess and recommending him to others. The remaining few who paid on principle were substantial enough to make him wealthy.

I have seen a lot of operations performed and have done some myself (mostly emergency) and I am firmly convinced that there is no fundamental quality in operative surgery that distinguishes it from any other medical routine or activity or that makes it any more valuable. I have been observing for a long time and the more I see the more I am convinced that there is at least as much skill and benefit in the correct use of a stethoscope as there is in the correct use of a scalpel. There is no difference between a cure by medical means and a cure by surgical means except in the dramatic aspect which has been created and cultivated by dramatic authors.

A *Tariff of Fees* puts medical practice on a par with the trades and makes technicians of us all, so Medicine should do as Trade does and base its fees on a common factor, such as *time*. It has no right to do its costing haphazardly or allow technicians to put their own value on their work, as has happened in the *Approved Tariff*. Every surgical fee in the *Tariff* should be scrapped and every surgical procedure re-appraised by a lay tribunal that has no interest in medical practice and can apportion without bias.

When surgical fees are brought into line with other medical fees, they will undergo a considerable reduction, but this will cause no hardship to masters of their craft. The *Tariff* has no force except where medical aid society members are accepted as such and a practitioner is entitled to refuse them, or accept them as self-paying patients on his own terms. The popular surgeon will still be sought after by those who can afford him and younger men will have more opportunities to prove their capabilities.

IMPLICATIONS OF MEDICAL AID SCHEMES FOR THE PROFESSION

Before closing I should like to express a few thoughts on the societies and schemes which operate medical aid. During the last few decades they were confined to the United Banks and Chamber of Mines and a few large firms; but recently, since commercial insurance companies have become interested, medical aid has expanded at an explosive rate and is likely to enrol the total White working population of South Africa before long. This expansion poses problems that are of the utmost significance to the medical profession because laymen will be controlling our incomes and actions and will have us at their mercy economically and professionally. That would not matter if they were all of the right type, but some of them do not seem to have the remotest idea of what ethics, loyalty or decency are.

Patients must countersign doctors' accounts, which is a way of instructing them to check and certify

them correct. In other words the society is telling the patient: 'We don't trust your doctor.' It made my heart glad that the Medical Services Plan trusts doctors enough to accept accounts direct, without having them checked by the patients.

When a charge is made for mileage, a questionnaire is sent to the patient asking him to give the distance between the doctor's rooms and residence and the patient's residence. Note that the patient is asked, not the doctor, which is contemptible. The society is telling the patient quite plainly:

'We regard your doctor as a petty swindler and suspect he's trying to twist an extra five-bob out of us.'

In the same questionnaire, which is printed and therefore routine, is the question: Who is your nearest doctor? This may be the first step on the way to dictating to the patient which doctor he should patronize.

If my patient knows that the society does not trust me, is it likely that he will have any faith in my discretion? It cannot be denied that the doctor-patient relationship is becoming more and more shopkeeper-customer, as medical aid expands.

Always on the look-out for petty cheating, the societies scrutinize accounts carefully and it has happened that I have charged 15s. for a visit, but not specified it as such. They immediately jumped to the conclusion that I was trying to cheat them of 2s. 6d. and paid me the lower fee for consultation. Similarly, night visits charged but not specified 'night' have been docked of the additional night charge. It is tantamount to calling me a thief.

Those are the people to whom we have to confide the nature of the diseases from which our patients are suffering!

The secretaries of societies ought to realize that honesty is indivisible and they must trust us altogether or not at all. In the latter case the response might be that of the dog that was given a bad name and if any doctor wanted to cheat them he could do it so easily, it isn't true.

SUMMARY

The family doctor is on his way out, being driven out by the *Tariff of Fees for Approved Medical Aid Societies*.

Fees for G.P.'s are so low that they find it uneconomic to keep patients whom they would normally treat throughout their illnesses. The patients are referred to specialists who like to have them in nursing homes.

If medical aid societies wish to finance themselves out of membership fees alone, they must encourage general practitioners to keep as many patients as possible in their own care.

A radical overhaul of fees in the *Tariff* is urgently necessary, not only to save family doctors from extinction but to save unsubsidized medical aid schemes which are bound to go under if the *Tariff* remains in its present form.

Medical aid is here to stay and, unless it can carry itself successfully in private hands, it is likely to come under governmental control and be turned into a national health service which, in turn, will turn us into a lot of underpaid and overworked doctors.

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